

Samsung - IUB Design Jam

# Lock Screen Notifications Re-design

SAMSUNG

## OVERVIEW

This case study was a part of Design Jam organized at my school by the Samsung UX Design team. We were asked to **reimagine Home/ App/ Lock screen** of our smartphones. While we were all involved in all aspects, I took the lead on managing the team, assessing Samsung's and Android's latest UI, and developing the new features and designs.

**Client:** UX Design team @Samsung

**Team:** Kevin Vu, Utkarsha Joshi, Shriyash Shete

**Duration:** 3 weeks

**Role:** UX Designer & Project Manager

## BACKGROUND

We receive push notifications from all apps. Every app wants to notify us to grab our attention.

Notifications on lock screen are the most powerful **triggers** to evoke user engagement. If not managed appropriately, users experience **information overload**, which becomes **detrimental to their digital wellbeing**.

## THE PURPOSE

The primary goal of showing notifications on the lock screen is straightforward. Users get to see the information **at a glance** and decide **whether to interact with it or not** without unlocking the phone.

## RESEARCH PROCESS

### Topic Exploration

Home, App, Lock  
screen UI evaluation  
Android vs. iOS

### Desk Research

Literature review  
Exemplar collection  
Current trends  
Analogous research

### User Research

User & expert interviews

### HMW

Opportunity mapping

## THE PROBLEM

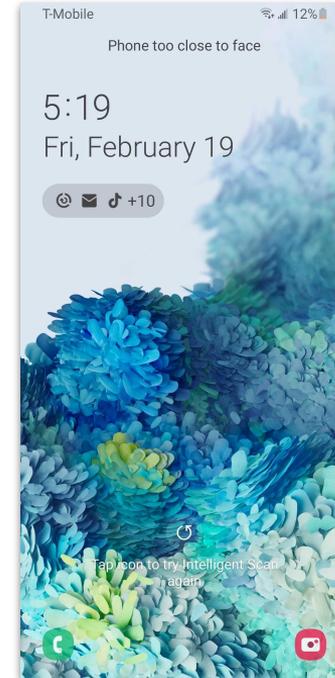
Users struggle to manage their notifications on the lock screen. They often feel **overwhelmed** and **distracted** by the number of notifications received each day. As a user continues to use new apps, they keep getting additional notifications.

## PAIN POINT #1

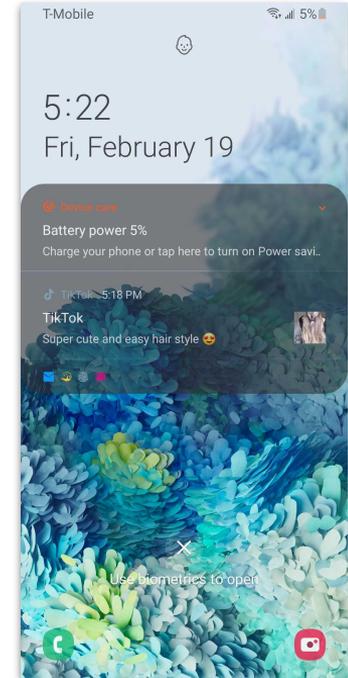
**'Icons only' option does not allow users to see any information without unlocking the phone. 'Details' option provides detailed information only for the few latest notifications.**

*"I feel like I'm missing out on the important information. So I keep notifications on but I can't view much on the lock screen like an iPhone..."*

Icons only view



Details view

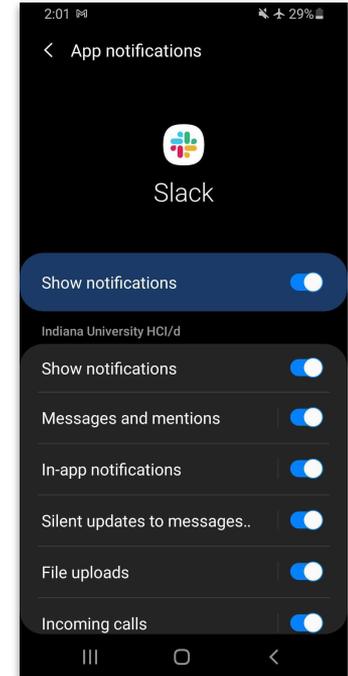
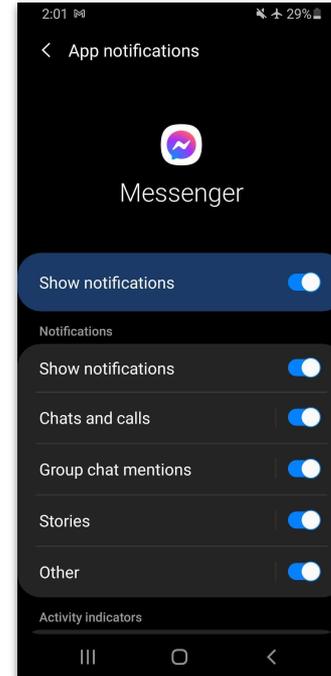


## PAIN POINT #2

**Managing every app's notifications individually through the settings panel is a very tedious process.**

*"That's way too many options...I wish I could control them easily"*

Too many options leads to indecision.

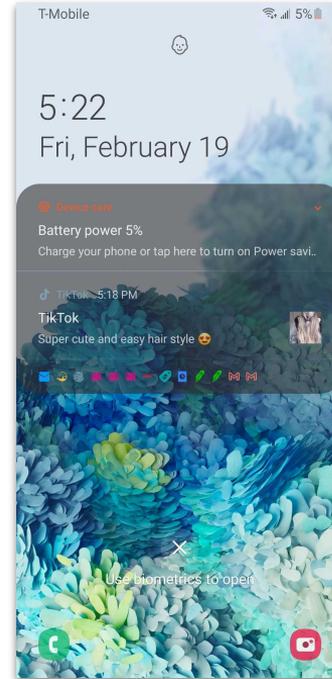


### PAIN POINT #3

**Users get overwhelmed with notifications. On the other hand, they have a fear of missing out after turning them off completely.**

*“That day I got so frustrated and turned off all WhatsApp notifications. But it didn’t help. Because it couldn’t turn off my anticipation for the messages for too long...”*

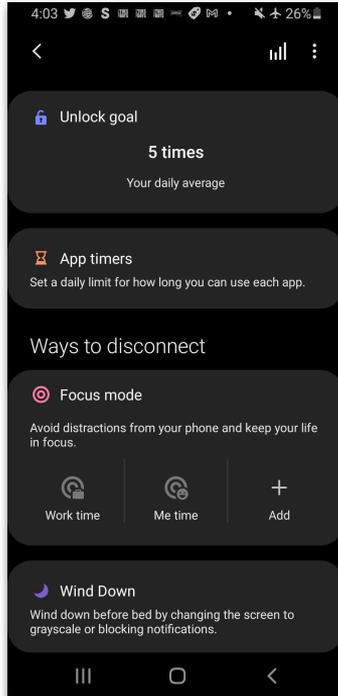
Too much information



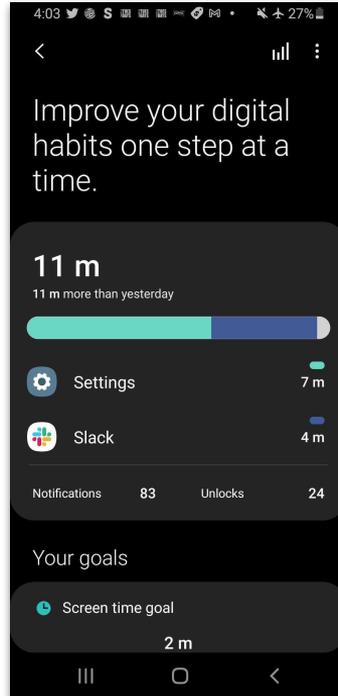
No information



# What has been done in the digital wellbeing space by Samsung?



Digital Wellbeing



Screen time



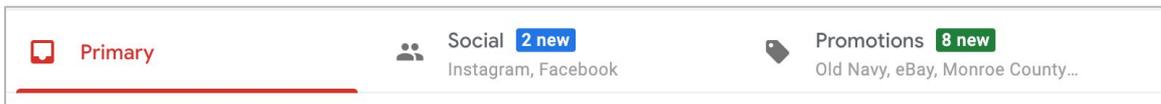
Bixby Routines

## OPPORTUNITY

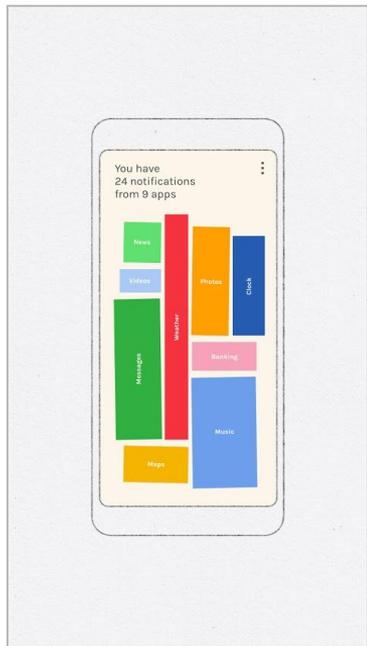
**Thus, it is only half the battle won.  
There's potential to improve the lock  
screen notification system to  
accommodate new features and  
supplement existing ones.**

**How might we re-organize lock screen notifications to help users quickly prioritize, control and consume information without losing their sanity?**

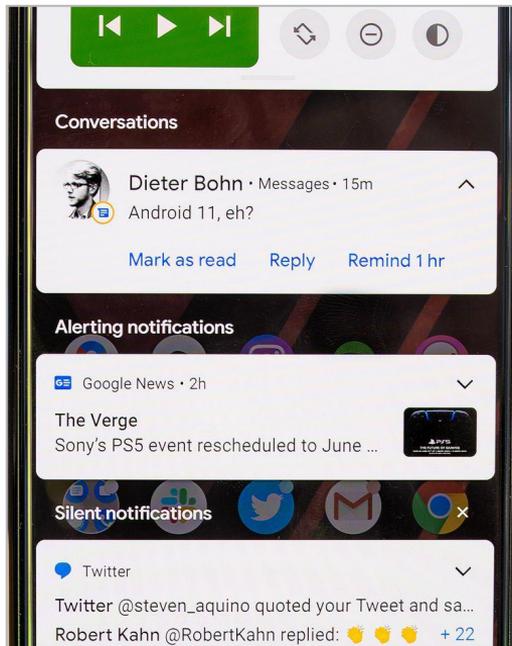
# Inspirations



Gmail inbox categories



Post Box Experiment by Google



Android 11 notification categories in the notifications panel



SooHo Choi's concept of iOS notifications

## Meet Emily.



Emily is a manager at an IT firm. She works remotely and owns a Samsung Galaxy S20.

She's wants to minimize her digital distractions, stay focused and attain maximum productivity. So has been using Bixby Routines to set goals and plan her daily tasks.

She loves the Bixby Routine feature but **along with that, she wants to manage other app notifications efficiently so she can stay on top of her important work activities.**

Emily updates her phone and discovers some changes to her lock screen notifications. She now sees a clear breakdown of the notifications with four categories based on her priorities.

## Four categories of notifications based on Emily's priority

**1**

**Bixby routine notifications  
(reminders + phone status)**

**2**

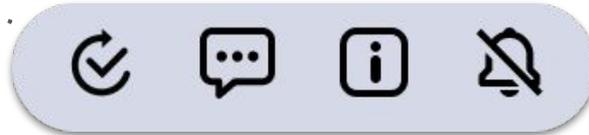
**Conversations**

**3**

**Alerting notifications**

**4**

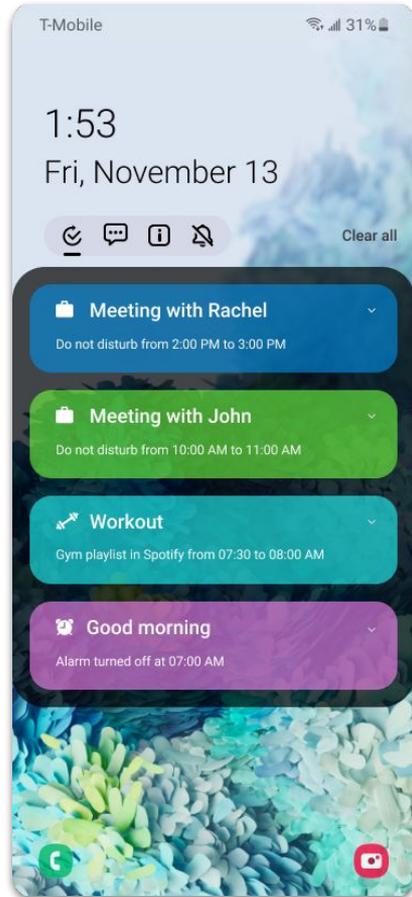
**Silent notifications**





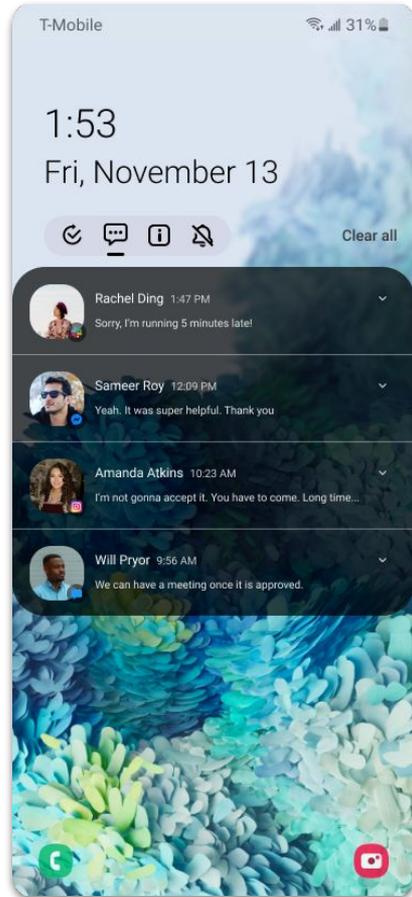
## Reorganized notifications

Emily is used to the 'icons only' view on her lock screen. So, she feels comfortable looking at these new priority-based categories with a **familiar visual style**. There are **no badges or numbers**, so she doesn't feel overwhelmed or distracted.



## 1. Bixby Routines

The first thing she sees is her tasks set for the day. She likes to follow her plan, and since work-life balance is her highest priority, she can **quickly get to what's most important to her.**



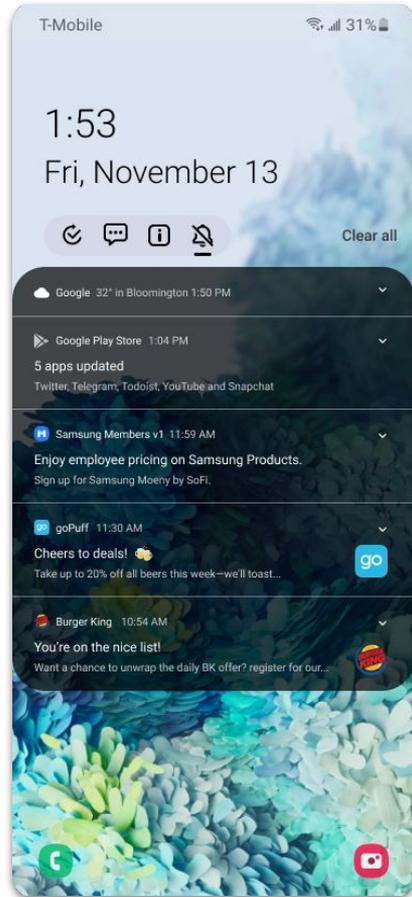
## 2. Conversations

She struggles to manage her conversations with people across multiple platforms. Emily doesn't want important messages to go unnoticed. The Conversations tab helps her **avoid unnecessary delays in communication.**



### 3. Alerting notifications

In her free time, Emily likes to review the notifications that are important but did not require immediate attention. Alerting notifications are **grouped together based on apps**. She can prioritize when and what to read first within the long scrollable list.



## 4. Silent notifications

The lowest priority notifications are the silent notifications which are **system generated or promotional**. She can quickly scan them at her leisure and clear them by swiping left or right individually or by pressing 'clear all'.

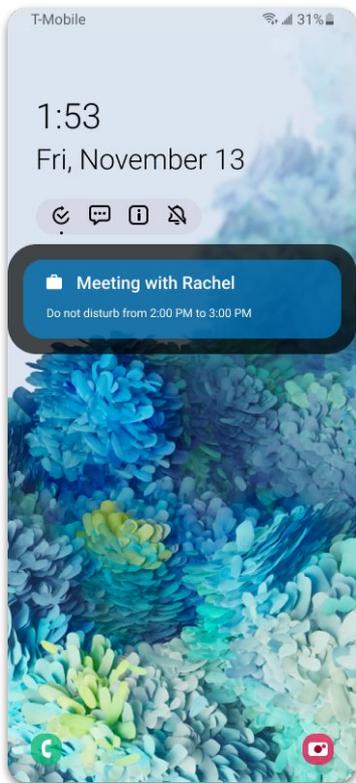
Emily is happy because this is tailored to her goals and reduces mental effort.

**But, the story doesn't end here...**

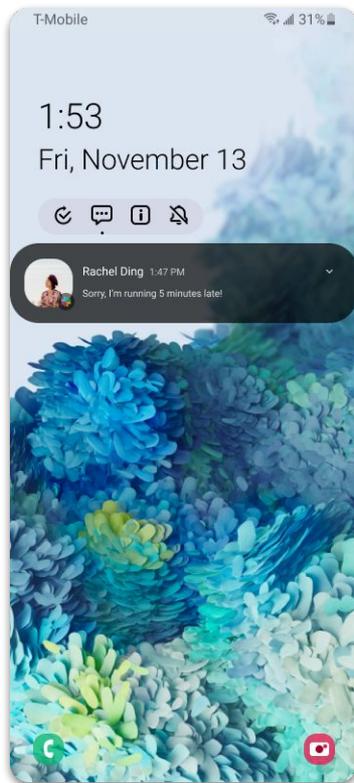
USE CASE #1

**How would Emily know which category the latest notification went into?**

**Design decision:** The latest notification appears with **a small black dot** below the icons, indicating the category it belongs to. After a few seconds, it goes back to default.



New notification from Bixby routines



New notification from conversations

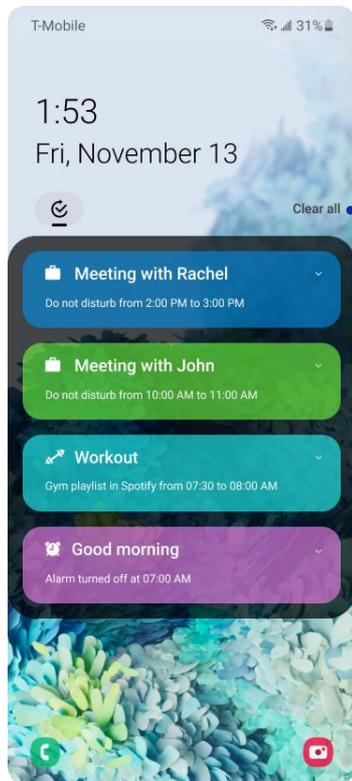


Default state after the wait period

USE CASE #2

**How would it be displayed if there are no notifications in all four categories?**

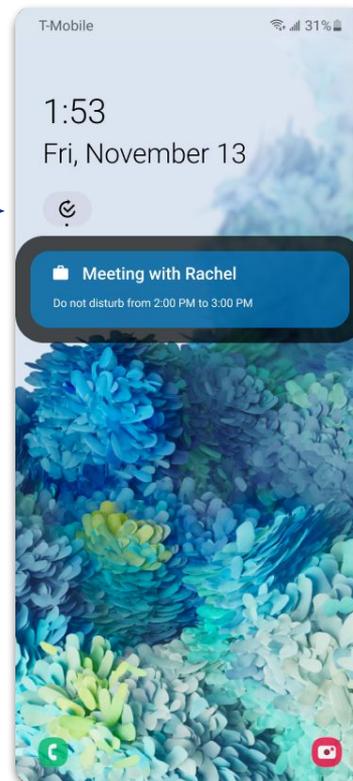
**Design decision:** Clear all option for each category. No icons when there are no notifications. **Icon appears with the first notification** to minimize clutter. So icon indicates that there are notifications inside.



When tapped on the Bixby Routines category



No notifications



New Bixby Routines notification

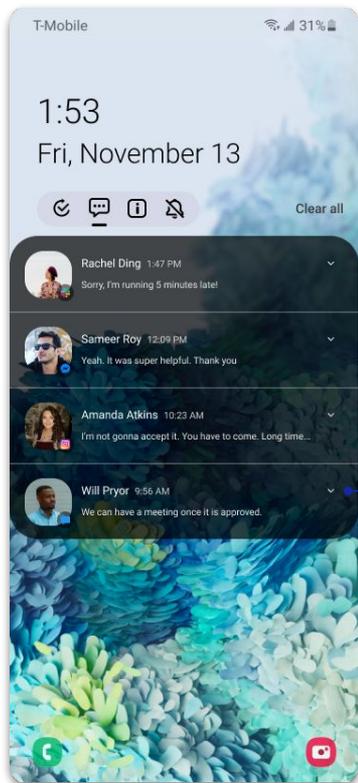


Default state

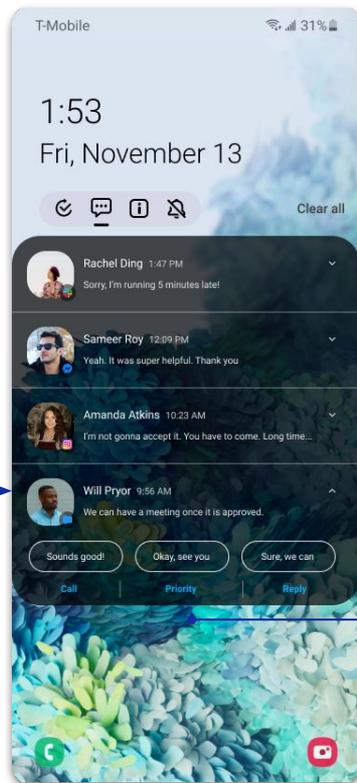
USE CASE #3

**How would Emily prioritize and control a notification within a category?**

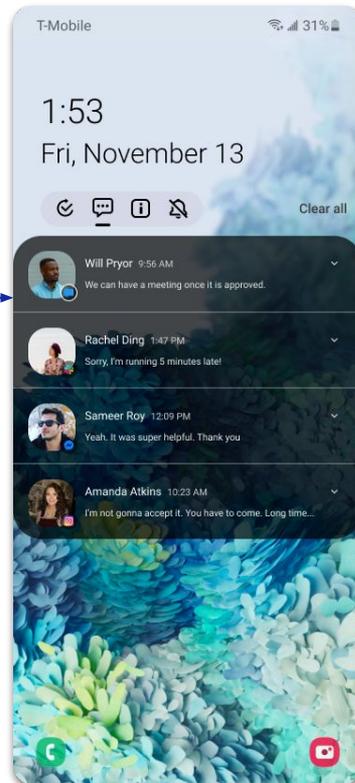
**Design decision:** Users can prioritize their conversations by pinning them to the top of the category.



Tab on the arrow to expand notification



Select priority



Notification moved to top of the category

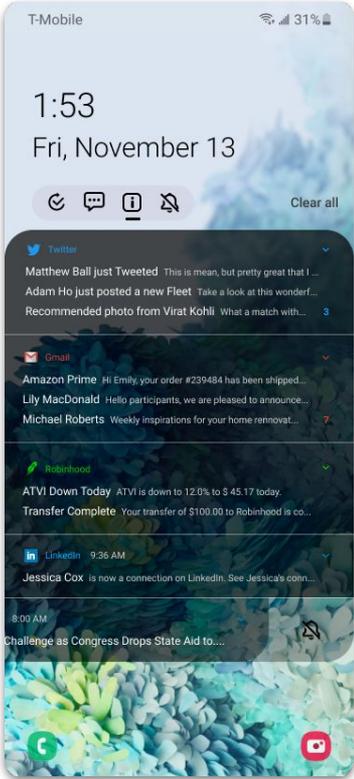
USE CASE #4

**How would Emily prioritize and control notifications between the categories?**

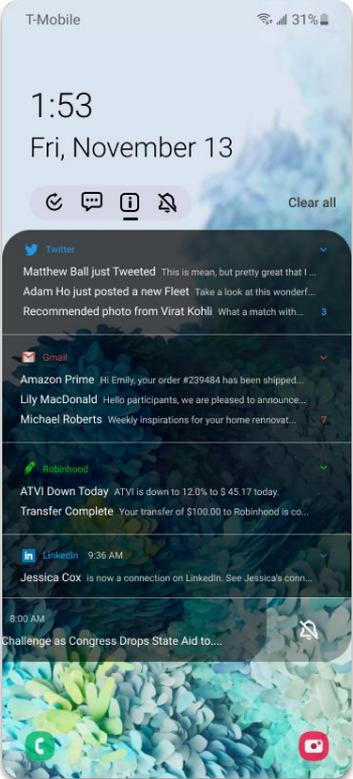
**Design decision:** Users can change alerting notifications to silent without having to go through the settings menu.



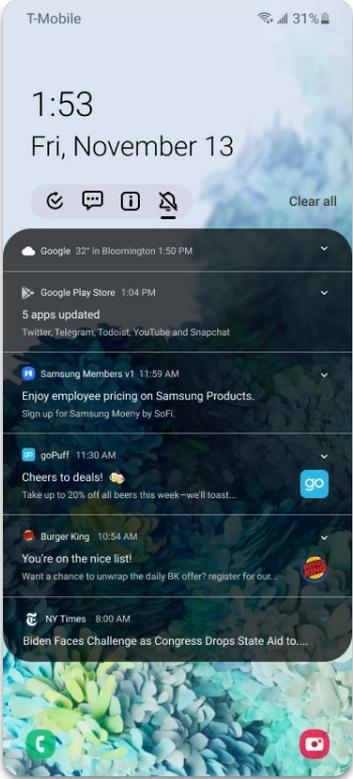
Choose notification



Left swipe displays silent icon



Silent icon pressed



Notification moved into the silent category

Right information at the right time at the right place.

**With just enough user control, Emily can now manage all her important tasks, meetings, conversations and consume information at her convenience.**

## MEASURING SUCCESS

	Goals	Signals	Metrics
<b>Engagement</b>	Keep users active based on their priorities	Users keep using this feature	<ul style="list-style-type: none"><li>• Avg. time spent in each category</li><li>• Number of taps, swipes</li></ul>
<b>Adoption</b>	Get users to upgrade their lock screen notification view	Number of users opting for this lock screen setting	<ul style="list-style-type: none"><li>• % increase in the number of users</li></ul>
<b>Retention</b>	Retain users with this feature for a long duration	Users are continuing with this notification view	<ul style="list-style-type: none"><li>• Avg. time of active users with this feature</li></ul>
<b>Happiness</b>	Improve user satisfaction	Positive reviews	<ul style="list-style-type: none"><li>• Number of satisfied users</li></ul>

**Thank you.**